

HPAI Outbreak 2014-2015

Surveillance Around HPAI Infected Backyard Flocks

August 31, 2015

Please note: These procedures may be revised as the situation develops. These surveillance parameters were designed in January for the highly pathogenic avian influenza (HPAI)-infected backyard flocks in the State of Washington.

DEFINITIONS

Infected Premises: Premises where a presumptive positive case or confirmed positive case was located based on laboratory results, compatible clinical signs, HPAI case definition, and international standards.

Contact Premises: Premises with susceptible animals that may have been exposed to HPAI, either directly or indirectly, including but not limited to exposure to animals, animal products, fomites, or people from Infected Premises.

Infected Zone: Zone that immediately surrounds an Infected Premises; the perimeter should be at least 3 km (~1.86 miles) beyond the perimeters of the presumptive or confirmed Infected Premises. This zone may be redefined as the outbreak continues.

Buffer Zone: Zone that immediately surrounds an Infected Premises; this is the area that is at least 7 km (~4.35 miles) beyond the perimeter of the Infected Zone (10 km beyond the Infected Premises). This zone may be redefined as the outbreak continues.

Control Area: Consists of an Infected Zone and a Buffer Zone; the perimeter of the Control Area should be at least 10km (~6.21 miles) beyond the perimeter of the closest Infected Premises. This area may be redefined as the outbreak continues.

Foreign Animal Disease Investigation: An investigation conducted according to VS Guidance 12001.2 (Ready Reference Guide for investigations is here).

SCOPE

An Infected Zone and Buffer Zone (a Control Area) will be created around an Infected Premises, including backyard premises. This document provides guidance for surveillance around a backyard flock that has been determined to be infected with HPAI. Surveillance activities and associated testing activities should be based on recommendations of the Unified (State-Federal) Incident Command; this guidance may require further modification.

PRIORITIES FOR SURVEILLANCE ACTIVITIES IN THE CONTROL AREA

The following are the priorities for surveillance activities in the Control Area; it is critical to investigate Infected and Contact Premises as rapidly as possible to detect, control, and contain the virus as rapidly as possible.

- 1. Investigation of Infected and Contact Premises.
- 2. Active and passive surveillance in the Infected Zone.
- 3. Active and passive surveillance in the Buffer Zone.

SURVEILLANCE PLAN

Active Surveillance

- 1. Conduct a census of poultry premises within the Control Area.
 - a. Identify all commercial poultry premises within the Control Area.
 - i. Survey crews should not enter commercial poultry premises unless instructed by the Incident Management Team (IMT).
 - b. Attempt to identify and visit all backyard poultry premises within the Infected Zone.
 - c. Attempt to identify and visit all neighborhoods within the Buffer Zone where backyard poultry are permitted by local law and commonly kept.
- 2. During each active surveillance visit to backyard poultry premises:
 - a. Enter and exit each premises according to established biosecurity procedures.
 - b. Complete the Avian Influenza Surveillance Supplemental Data Sheet.
 - c. Observe the flock for HPAI compatible signs.
- 3. In the event that any of the following conditions are met, sample the flock according to the sampling scheme (see below):
 - a. If HPAI compatible signs are observed.
 - b. If epidemiological links are identified.
 - c. If the flock owner volunteers to have the flock sampled.
- 4. Submit samples to the designated National Animal Health Laboratory Network (NAHLN) laboratory as instructed by the IMT.

Completion of Active Surveillance

- 1. Active surveillance in the Control Area is complete when:
 - a. The census of poultry premises in the Infected Zone is completed.
 - b. Results are negative for all tests for avian influenza from samples collected within the Control Area.
 - c. At least 21 days have elapsed since depopulation of the last Infected Premises.

Passive Surveillance

- 1. Investigate reports of avian illness or death in the Control Area as rapidly as possible.
- 2. Complete the Avian Influenza Surveillance Supplemental Data Sheet with the owner, prior to collecting any samples.
- 3. Observe the flock for HPAI compatible signs.
- 4. If the investigator determines that the HPAI virus is a likely cause of the clinical signs in the flock, a Foreign Animal Disease Investigation should be initiated.
 - a. Follow the procedures outlined in VS Guidance Document 12001.
 - b. Duplicate samples should be collected.
 - c. Submit one set of samples to the National Veterinary Services Laboratory (NVSL) and another set of samples to the designated NAHLN laboratory.
 - d. If there is only a single sample collected, this sample must be submitted to NVSL.

SAMPLING SCHEME FOR BACKYARD POULTRY

Collect swabs from a representative sample of each species of poultry in the flock. Use Table 1 to determine the total number of birds to sample on a premises.

- 1. Type of samples:
 - a. For gallinaceous birds, swab oropharyngeal cavities.
 - b. For domestic waterfowl, swab cloacas.
- 2. Place swabs from different species in separate tubes of media:
 - a. Up to 5 swabs per vial for oropharayngeal swabs.
 - b. Cloacal swabs from domestic ducks may be pooled, up to 5 swabs per vial.
 - c. Other species of domestic waterfowl (e.g., geese), must be sampled singly, one swab per vial.
- 3. Swirl each swab in the BHI media and squeeze excess liquid out against the side of the tube. Remove and dispose of the swab.
- 4. Apply bar code(s) provided by the lab to the BHI tube(s) and affix the duplicate bar code to the laboratory submission form(s).
- 5. Complete the lab submission form and annotate species and type of sample collected.
- 6. Photocopy the lab submission form, scan, and submit to the IMT for the Premises ID number. Place this number (known as the PremID) on the original submission form *prior* to submitting to the laboratory.

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Table 1: Number of Birds to Sample on a Premises

Total number of birds on each premises	Minimum number of birds to be sampled
10 or less	Sample all
20	15
30	15
40	15
50 or greater	20

FOR MORE INFORMATION

USDA APHIS VS. *Surveillance Sampling for Commercial Premises in Control Area.* <u>www.aphis.usda.gov/fadprep</u>.

USDA APHIS VS. *Highly Pathogenic Avian Influenza (HPAI) Response Plan: The Red Book.* www.aphis.usda.gov/fadprep.

USDA APHIS VS. 2014. *Guidance Document 12001.2: Policy for the Investigation of Potential Foreign Animal Disease/Emerging Disease Incidents (FAD/EDI).*www.aphis.usda.gov/animal health/lab info services/downloads/VSG 12001.pdf.